

In The Claims

1. (Currently Amended) A printer, comprising:
an image processing means for,
storing a plurality of gamma data in an updateable table, each of the plurality of gamma data being different from each other in a value on which a color appearance characteristic of a printing media depends, and
converting an image composed of R, G, and B signals to a set of Y, M, and C complementary-color images, each image being converted using one of the plurality of gamma data;
means for selecting a best of the set of Y, M, and C complementary color images;
and
means for adjusting a printing process of the printer with the gamma data used to convert the selected best Y, M, and C complementary color image;
wherein the means for selecting a best Y, M, and C complementary color images comprises,
means for selecting, by a user, an important area of a subject image;
means for creating a plurality of test images, each test image being created by applying an individual one of the data to the important area of the subject image;
means for printing the test images;
means for outputting a set of markers, each marker corresponding to one of the printed test images and comprising a graphical representation of the corresponding printed test image but not derived from the test image or subject image, on a display screen; and
means for retrieving a user selection of the markers.

2. (Previously presented) The printer as set forth in claim 1, wherein the table comprises a memory means in which there is stored the plurality of gamma data different from each other in gamma value upon which the color appearance characteristic of the printing medium depends.

3. (Previously presented) The printer as set forth in claim 2, wherein the image processing means calculates the plurality of gamma data with reference to a reference image and changes the addresses of the data in the memory means.

4. (Previously presented) The printer as set forth in claim 1, wherein the image processing means has a complementary color converter in which the R, G, and B image is converted to the set of Y, M, and C complementary-color images being in the complementary relation with the R, G, and B image.

5. (Previously presented) The printer as set forth in claim 4, wherein the conversion to the Y, M, and C complementary-color images for a desired number of frames is effected by an image dividing means which divides the Y, M, and C complementary-color images by a hardware capability of the image processor in a main scanning direction and by a software capability of the image processor in a sub scanning direction to generate Y, M, and C images for a number of columns for display of the frames.

6. (Previously presented) The printer as set forth in claim 1, wherein:
the table is a memory means in which there is stored the plurality of data different from each other in a gamma value upon which the color appearance characteristic of the printing medium depends, and a complementary color converter in which the R, G, and B image is converted to Y, M, and C images being in a complementary relation with the R, G, and B image; and

the image processor includes means for determining a number of frames for output of the Y, M, and C complementary-color images using the plurality of data.

7. (Previously presented) The printer as set forth in claim 6, wherein the conversion to the Y, M, and C complementary-color images for the number of frames is effected by an image dividing means which divides the Y, M, and C complementary-color images by the hardware in a main scanning direction and by the software in a sub scanning direction to generate Y, M, and C images to determine a number of columns to be used to output the frames.

8. (Previously presented) The printer as set forth in claim 1, wherein the printer includes a sublimation ink ribbon and the media includes printing paper.

9. (Currently Amended) A color adjusting method for use in a printer to print a video signal using printing media, the method comprising steps of:

storing a plurality of data different from each other in a value on which a color appearance characteristic of the printing media depends in an updateable table;

converting, using the video signal, an image composed of R, G, and B video signals based on the video signal to complementary-color images to be output in a number of columns;

printing the set of complementary-color images as an output from the converting step using the printing media;

selecting a desired one of the set of complementary-color images as printed on printing paper at the printing step; and

adjusting colors of an output image according to the image selected at the selecting step;

wherein the step of selecting a desired one of the set of complementary-color images as printed on printing paper, comprises the steps of,

selecting, by a user, an important area of a subject image;

creating a plurality of test images, each test image being created by applying an individual one of the data to the important area of the subject image;

printing the test images;

outputting a set of markers, each marker corresponding to one of the printed test images and comprising a graphical representation of the corresponding printed test image but not derived from the test image or subject image, on a display screen; and

retrieving a user selection of the markers.

10. (Previously presented) The method as set forth in claim 9, wherein at the step of storing, the plurality of data different from each other are gamma values upon which the color appearance characteristic of the printing media depends is stored.

11. (Previously presented) The method as set forth in claim 10, further comprising the step of updating the table with a set of gamma values based on a reference image.

12. (Previously presented) The method as set forth in claim 9, wherein at the converting step, the R, G, and B images are converted to Y, M, and C images being in the complementary relation with the R, G, and B images and further to Y, M, and C complementary-color images for a desired number of columns based on capabilities of an image processor performing the conversion.

13. (Previously presented) The method as set forth in claim 12, wherein the conversion to the Y, M, and C complementary-color images for the desired number of columns is effected by dividing the Y, M, and C complementary-color images by a hardware capability of the image processor in a main scanning direction and by a software capability of the image processor in a sub scanning direction to generate Y, M, and C images for the desired number of columns.

14. (Previously presented) The method as set forth in claim 9, wherein the plurality of data are different from each other in gamma value upon which the color appearance characteristic of the printing media depends, and the R, G, and B are converted to Y, M, and C images being in the complementary relation with the R, G, and B image and further to Y, M, and C complementary-color images in a desired number of frames using the plurality of data.

15. (Previously presented) The method as set forth in claim 14, wherein the conversion to the Y, M, and C complementary-color images for the desired number of frames is effected by dividing the Y, M, and C complementary-color images by a hardware capability of the image processor in a main scanning direction and by a software capability of the image processor in a sub scanning direction to generate Y, M, and C images for a number of columns in which the converted images are to be output.

16. (Previously presented) The method as set forth in claim 9, wherein the printing media includes a sublimation ink ribbon and printing paper.

17. (Previously presented) The method as set forth in claim 9, wherein at the selecting step, the desired image is selected by prompting the user to select one of positions on a monitor screen each position corresponding to one of the plurality of images printed on the printing paper.

18. (Previously presented) The printer according to claim 1, wherein said means for selecting comprises:

means for printing the set of Y, M and C complementary-color images in a test pattern;

means for outputting a selection pattern having a set of markers, each marker respectively corresponding to one of the test pattern images; and

means for identifying one of the markers corresponding to a best one of the test pattern images.

19. (Previously presented) The printer according to claim 18, further comprising means for updating the updateable table based on a reference image.

20. (Previously presented) The printer according to claim 19, wherein the table is updated by acquiring gamma data by calculation and storing each gamma data at addresses in the table.

21. (Previously presented) The printer according to claim 20, wherein:
the test pattern images are printed by updating a gamma value used for each line printed by changing an address that reads a corresponding gamma data from the table;
the address is changed in a sub-scanning direction by software; and
the address is changed in a main-scanning direction by hardware.

22. (Currently Amended) A method comprising the steps of:
storing a plurality of data different from each other in a value on which a color appearance characteristic of a printout depends;
selecting, by a user, an important area of a subject image;
creating a plurality of test images, each test image being created by applying an individual one of the data to the important area of the subject image;
printing the test images;
outputting a set of markers, each marker corresponding to one of the printed test images, on a display screen;
retrieving a user selection of the markers; and
applying the data used to create the test image corresponding to the selected marker to a printing operation;
wherein each of the set of markers comprises a graphical representation of the corresponding printed test image but not derived from the test image or subject image.

23. (Previously presented) The method according to claim 22, wherein said step of applying the data comprises saving the data used to create the test image corresponding to the selected marker in a printer.

24. (Previously presented) The method according to claim 23, wherein said step of storing comprises storing gamma data.

25. (Previously presented) The method according to claim 23, wherein said step of storing comprises storing the data in an updateable table.

26. (Previously presented) The method according to claim 23, wherein said step of storing comprises storing gamma data based on the subject image in an updateable table.